Approved For Release 2005/11/23 : CIA-RDP80B01138A000100030058-8

25X1A

5 January 1967

MEMORANDUM FOR: D/DCI/NIPE

SUBJECT: R and D Orientation

1. The purpose of this memo is to discuss the factors bearing on the question, "Do we orient R and D activities in the intelligence field toward the correction of the known deficiencies in our intelligence system?".

2. Within the government structure intelligence R and D, as well as collection and use, is spread in many places. A large fraction of the R and D is carried out by the elements of DOD with smaller parts being accomplished in non-DOD agencies. CIA probably does less than 15 per cent of the intelligence R and D. Within that R and D accomplished by DOD there are two objectives, the first is applicable to attaining, testing, and maintaining a potential for intelligence activities during actual combat, and the second is applicable to intelligence activities carried out in a general peacetime environment. There are obviously large areas of overlap in the R and D accomplished for these two objectives, leading to perhaps invalid estimates of the true orientation of R and D towards specific deficiences in peacetime systems.

3. Within CIA, as is true in all R and D, the intelligence R and D can be categorized into two general classes, that leading to general state-of-the-art improvements, and that orientated to specific, unique, substantive intelligence problems. Examples are the research in improved photographic film technology as a general improvement and the development of a new photo-satellite system as a specific improvement. For the general improvement the definition of deficiencies is at best vague, and the R and D might result in better performance in many systems. R and D on specific systems generally is predicated on a well validated case of deficiency avoidance. The proper split between R and D effort towards general improvement and that towards specific new

25X1A

25X

25X

Good paper. You might want to add a P on our recent [redacted] exercise as [redacted] example of how we

25X1

Approved For Release 2005/11/23 : CIA-RDP80B01138A000100030058-8

Approved For Release 2005/11/23 : CIA-RDP80B01138A000100030058-8

systems is determined by judgment which in turn depends on the relative importance of near term problems vs. longer term problems, as well as on estimates of the value of the general vs. the specific improvement.

4. Another factor relating to R and D orientation is that quite often even specific efforts result in payoffs in non-intelligence fields where large deficiencies may exist. For example, the large R and D effort leading to the OXCART aircraft made possible not only the SR-71, one of the Air Forces' important combat intelligence collectors, but also to the YF-12, a long range high performance fighter/intercepter, and made important contributions to the needed SST technology. The point is that deficiencies in non-intelligence areas can affect the direction of intelligence R and D.

5. One of the environmental factors on the orientation of intelligence R and D is that in many cases one has to initiate such activity on the basis of expected deficiencies, that is, the enemy posture and its changes tend to create deficiencies in our intelligence system much too late for our R and D initiation. Thus, one has to predict possible or potential deficiencies and try to cure those when in practice not all the predicted deficiencies actually occur.

6. The essential security measures in intelligence R and D work tends to at least make it more difficult to achieve proper national R and D orientation. Along with the great degree of compartmentation that exists, there is also the problem of the various parochialviews of what is an important deficiency. Obviously the Air Force views missing information about Soviet ICBMs as more serious than missing information about Soviet tanks. Another aspect of differing views is that some intelligence directly relates to very expensive DOD weapon system decisions while other types of information, though considered extremely vital, does not necessarily impact large monetary judgments. An example of the latter might be [redacted] 25X1

25X1 [redacted]

Approved For Release 2005/11/23 : CIA-RDP80B01138A000100030058-8

Approved For Release 2005/11/23 : CIA-RDP80B01138A000100030058-8

7. Even though there are severe complexities in reaching proper judgments about intelligence R and D orientation, there are on-going efforts to develop evaluation techniques for improving these judgments. In addition, a much better information base line is now established than was available some years ago. This in itself makes possible better emphasis judgments. The expanding technology which furnishes the large areas of choice in both intelligence R and D and systems also results in the vastly improved base line information and the techniques to evaluate quantitatively the relative seriousness of various intelligence system deficiencies.

8. On balance, I would conclude that a relatively good balance currently exists between deficiency oriented intelligence R and D and general R and D in the broad national sense. Rapid improvements in evaluation techniques--and input data--can be expected to lead to even better allocation of intelligence R and D efforts in the future.

25X1A

[redacted]
ASA/DCI/NIPE

Approved For Release 2005/11/23 : CIA-RDP80B01138A000100030058-8

Approved For Release 2005/11/23 : CIA-RDP80B01138A000100030058-8

25X1A

SENDER WILL CHECK CLASSIFICATION TOP AND BOTTOM

	UNCLASSIFIED		CONFIDENTIAL		SECRET

CENTRAL INTELLIGENCE AGENCY

OFFICIAL ROUTING SLIP

TO	NAME AND ADDRESS	DATE	INITIALS
1	[redacted]		
2	6E22		
3			
4			
5			
6			

	ACTION		DIRECT REPLY		PREPARE REPLY
	APPROVAL		DISPATCH		RECOMMENDATION
	COMMENT		FILE		RETURN
	CONCURRENCE		INFORMATION		SIGNATURE

Remarks:

"File in "Chron"

Shown to Mr. Bross, he said to continue & expand these thoughts hopefully into a more quantitative approach. our 6 Jan 67.

FOLD HERE TO RETURN TO SENDER

FROM: NAME, ADDRESS AND PHONE NO.	DATE

	UNCLASSIFIED		CONFIDENTIAL		SECRET

FORM NO. 2-61 237 Use previous editions (40)

Approved For Release 2005/11/23 : CIA-RDP80B01138A000100030058-8